

TRANSFER DEVICE FOR PIECE-GOODS, ESPECIALLY FOR POSTAL ITEMS

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INVENTOR(S)- SCHUSTER, Rudolf Graf-Andechs-Strasse 8 D-85551 Kirchheim DE

INVENTOR(S)- RASCHKE, Josef Sommerhausstrasse 11 D-85652 Pliening DE

PATENT ASSIGNEE(S)- SIEMENS AKTIENGESELLSCHAFT (200520)

Wittelsbacherplatz 2 80333 Munchen DE **DESG. COUNTRIES**- AT; BE; CH; DE; DK; ES; FR; GB; GR; IE; IT; LI; LU; MC; NL; PT; SE

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EXEMPLARY CLAIMS- Transfer device for items (S), in particular for mail, having a rotating paddle wheel (FR) whose paddles (F) form pockets (Z) which receive the items (S) arriving on a first conveying device (FE1) and discharge said items onto circulating item carriers (ST) of a second conveying device (FE2), the speed (v1) and the spacing (t1) of the incoming items (S), the circumferential speed (u) and the circumferential spacing (t2) of the paddle wheel (FR) and the speed (v3) and the spacing (t3) of the circulating item carriers (ST) being matched to one another, characterised in that the paddles (F) of the paddle wheel (FR) exhibit a plurality of gaps (L1) arranged one behind the other in the axial direction, in that segments (SG1) of the first conveying device (FE1) are guided into the pockets (Z) of the paddle wheel (FR) in the region of the gaps (L1), and in that the segments (SG1) of the first conveying device (FE1) are guided around coaxially and rotatably arranged deflection wheels (UR) of the paddle wheel (FR).
Transfer device according to Claim 1, characterised in that the paddles (F) are aligned tangentially with respect to a circle which runs concentrically with the wheel axle (RA) of the paddle wheel (FR).

Transfer device according to Claim 1 or 2, characterised in that the paddle wheel (FR) is

equipped with fixedly arranged additional paddles (ZF) which each form, together with a trailing paddle (F), empty pockets (LZ) which are assigned to the gaps (L2) between two groups of item carriers (ST).

Transfer device according to one of the preceding claims, characterised in that arranged upstream of the first conveying device (FE1), which is subdivided into segments (SG1), is a further conveying device (FEW), which is subdivided into segments (SG2), and in that, downstream of the transfer location, the segments (SG2) of the further conveying device (FEW) are guided beneath the common conveying plane of the first conveying device (FE1) and of the further conveying device (FEW).

Transfer device according to one of the preceding claims, characterised in that the paddle wheel (FR) and the first conveying device (FE1) are driven by a common motor (M).

Transfer device according to one of the preceding claims, characterised in that guide means for the items (S) are assigned to that circumferential region of the paddle wheel (FR) which is located upstream of the location of transfer to the second conveying device, as seen in the direction of rotation (DR).

Transfer device according to Claim 6, characterised in that the guide means are formed by an endlessly circulating belt (EB).